

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Joseph N. Coalter, III et al.

Application No.: 10/544,278

Confirmation No.: 1317

Filed: August 3, 2005

Art Unit: 1713

For: MORPHOLOGY CONTROLLED OLEFIN  
POLYMERIZATION PROCESS

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Examiner: Caixia Lu

**AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION AND  
REQUEST FOR A ONE-MONTH EXTENSION OF TIME**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

This Amendment is being filed in reply to the Office Action dated August 3, 2007.

Attached hereto is a Request for a one-month extension of time. The director is hereby authorized to charge any additional fees to the Deposit Account No. 04-1512.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 3 of this paper.

**Remarks/Arguments** begin on page 4 of this paper.

### AMENDMENTS TO THE CLAIMS

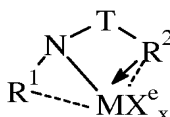
Kindly amend the Claims, without prejudice, as shown below in the listing of claims.

The listing of claims, shown below, will replace all prior versions, and listings, of claims in the instant Application:

#### Listing of Claims:

1. (currently amended) A catalyst composition comprising:

a catalyst compound selected from the group consisting of Group 4 metal complexes containing one or more ligands that are  $\pi$ -bonded to the transition metal, and metal complexes of the formula,



wherein

$R^1$  is selected from alkyl, cycloalkyl, heteroalkyl, cycloheteroalkyl, aryl, and inertly substituted derivatives thereof containing from 1 to 30 atoms not counting hydrogen, [;]

$T$  is a divalent bridging group of from 1 to 20 atoms not counting hydrogen,

$R^2$  is a  $C_{6-20}$  heteroaryl group containing Lewis base functionality,

$M$  is the Group 4 metal,

$X^e$  is an anionic, neutral or dianionic ligand group,

$x$  is a number from 0 to 5 indicating the number of such  $X^e$  groups, and

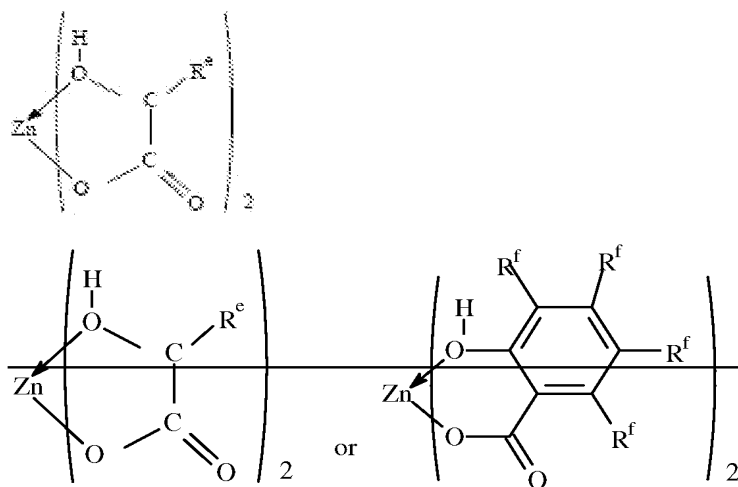
bonds, optional bonds and electron donative interactions are represented by lines, dotted lines and arrows respectively; and

an activator capable of converting said catalyst compound into an active catalyst for addition polymerization;

optionally a carrier;

optionally a liquid diluent, and

a hydroxycarboxylate metal salt additive corresponding to the formula:



wherein R<sup>e</sup> and R<sup>f</sup> independently each occurrence are hydrogen, halogen, or C<sub>1-6</sub> alkyl.

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (previously presented) A catalyst composition according to claim 1 wherein the catalyst compound is a  $\pi$ -bonded Group 4 metallocene.

6. (previously presented) An olefin polymerization process wherein one or more olefin monomers are polymerized in the presence of a catalyst composition characterized in that the catalyst composition corresponds to any one of claims 1 or 5.

**REMARKS/ARGUMENTS**

Claim 1 has been amended.

**35 U.S.C. Section 103 Rejection:**

Claim 1 has been amended. This amendment places Claim 1 and all the Claims which depend from it in condition for allowance.

The amendments to Claim 1 have overcome all the pending rejections to Claim 1 and all the claims which depend from Claim 1; accordingly, Claim 1 and all the claims which depend from Claim 1 are patentable. Therefore, the Applicants respectfully request the Examiner to reconsider the rejections of the Claims and to find all the pending Claims patentable.

Dated: December 3, 2007

Respectfully submitted,

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